

# MoST

## Monitoring Sea-water intrusion in coastal aquifers and Testing pilot projects for its mitigation

ID 10047743

Final event in Venice

22<sup>nd</sup> June 2022

FOLLOW-UP REPORT

Work Package:	2. Communication activities
Deliverable:	WP2.3_PP3_ Follow-up report

Version:	Final	Date:	06/2022
Type:	Report		
Availability:	Public		
Responsible Partner:	Veneto Region		
Editor:	Veneto Region		

The final event organized on 22th of June 2022 by Veneto Region (PP3) in Venice, was foreseen by the AF of the MoST Project and by the Communication Plan in WP2.

It was addressed mainly to Public Authority (Local, regional and national), but was open also to Universities and research institutes and to General Public.

Attended at the event nr. 48 participants: 35 on site and 13 on line.

It has been possible attend it on site and on line Link to participate in streaming: <https://call.lifeseizecloud.com/5452472>

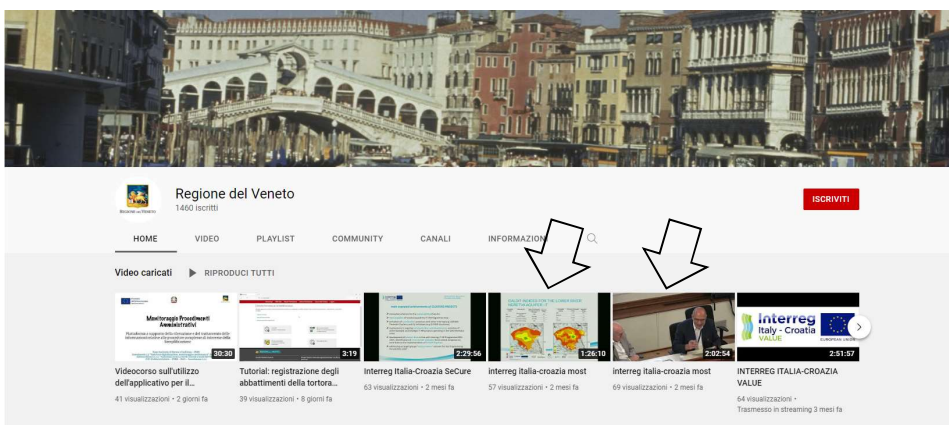
English-Italian translation was guaranteed.



Event attendees views

A video of the event was registered at this link:

<https://www.youtube.com/channel/UCkZgHeZp11h21quvZMF9B4A/featured>



Site screen



In the occasion of event was realized an given a technical publication, a gadget a video (link: Informative Video EN/HR: <https://youtu.be/vmipJu0L-GI> - Video Informativo EN/ITA: <https://youtu.be/ubaMtqiOP2Q>)



Gadget photos (folder with brochures and USB drive)



Video MoST photos

In the following pages are illustrated with a brief description of the speakers presentations.



Speakers presentations views

## AGENDA

Wednesday, 22<sup>nd</sup> June 2022 – Palazzo Grandi Stazioni, Venezia

**09:00 – 09:30**      **Registration of participants**

09:30 – 10:00

**Greetings by the Authorities**

*Coordinator of the conference*

*Dr. **Valentina Bassan**, Soil and Coast Defense Directorate, Veneto Region*

**Introduction of the MoST Project**

*Prof. **Paolo Salandin**, Department of Civil, Environmental and Architectural Engineering, University of Padova – Lead Partner of MoST Project*

10:00 - 11:00

**The Italian site: MoST project activities and outcomes**

“Hydro-stratigraphical setting, aquifer monitoring and vulnerability of the Venice site”

*Dr. **Chiara Cavallina** - Dr. **Luigi Tosi**, Institute of Geosciences and Earth Resources-National Research Council, Padova*

“Hydrological and agronomic monitoring of the Venice experimental site”

*Dr. **Ester Zancanaro**, Department of Civil, Environmental and Architectural Engineering, University of Padova*

“Built-up and instrumentation of an intake infrastructure to mitigate saltwater intrusion in the Venice site”

*Eng. **Andrea Artuso**, Land Reclamation Authority Adige Euganeo*

“Laboratory physical model: experiment outcomes for homogeneous and heterogeneous aquifers”

*Prof. **Paolo Salandin** - Dr. **Tommaso Trentin**, Department of Civil, Environmental and Architectural Engineering, University of Padova*

“Local to field-scale numerical modelling of subsurface flow and saltwater mitigation in the Venice site”

Dr. **Anna Botto** – Prof. **Pietro Teatini**, *Department of Civil, Environmental and Architectural Engineering-University of Padova*

“Guidelines to contrast salinization effects on crop production”

Prof. **Francesco Morari**, *Department of Agronomy, Animals, Food, Natural resources, and Environment, University of Padova*

**11:00 – 11:30**      **Coffee break**

11:30 – 12:30

**The Croatian site: MoST project activities and outcomes**

“Agricultural conditions and vulnerability assessment for the Neretva river site”

Dr. **Ivan Racetin**, *Department of geodesy and geoinformatics, Faculty of Civil Engineering, Architecture and Geodesy, University of Split*

“Hydro-geo settings of Neretva coastal system and laboratory activities”

Prof. **Veljko Srzić**, *Department of Water Resources, Faculty of Civil Engineering, Architecture and Geodesy, University of Split*

“Numerical modeling activities and mitigation measures implementation”

Dr. **Iva Matić**, *Department of Water Resources, Faculty of Civil Engineering, Architecture and Geodesy, University of Split*

12:30 – 13:00

**Discussion and conclusions**

**13:00 – 14:00**      **Buffet**

**Link to participate in streaming:** <https://call.lifesizecloud.com/5452472>

**Also live on Youtube – Veneto Region channel:**

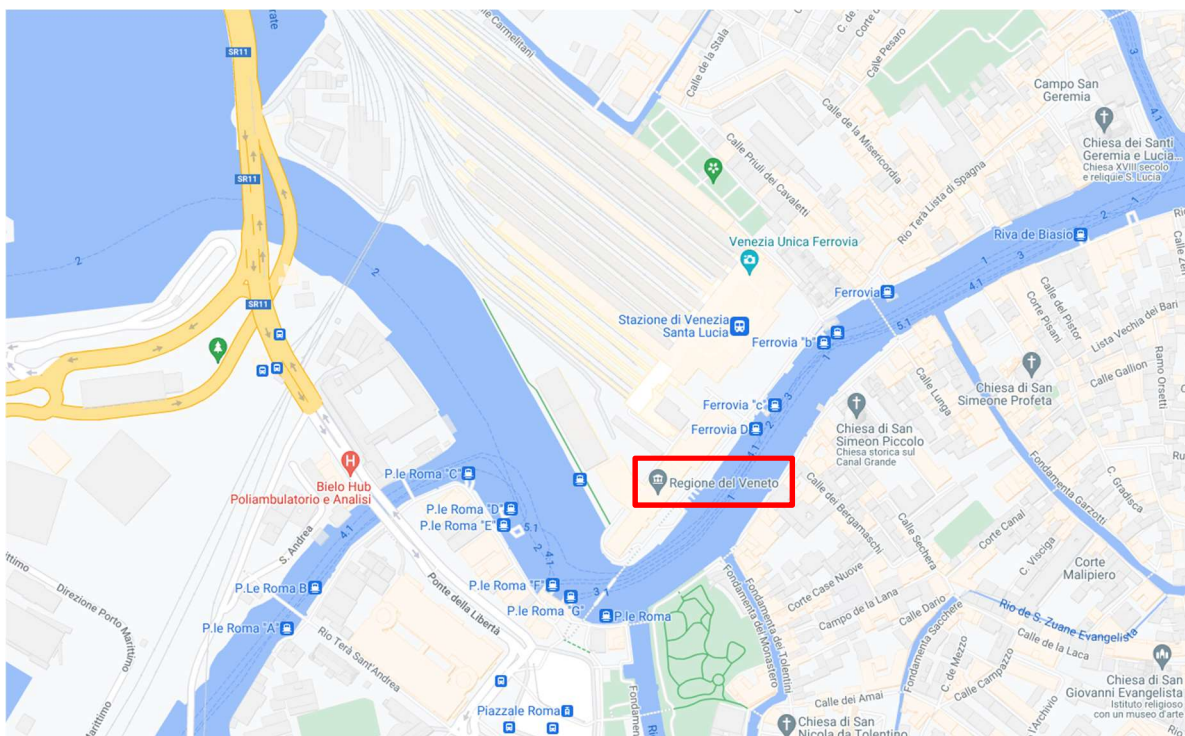
<https://www.youtube.com/channel/UCkZgHeZp11h21quvZMF9B4A/featured>

English-Italian translation will be guaranteed.

### Location:

Regione del Veneto - Palazzo Grandi Stazioni

Fondamenta Santa Lucia – Cannaregio, 23 - 30121 Venezia [click here for the map](#)



### Registration:

The event is limited, **please register here:** <https://wowtextura.it/registration-most>

### Contacts:

Valentina Bassan [valentina.bassan@regione.veneto.it](mailto:valentina.bassan@regione.veneto.it)

Eleonora Scarpa [eleonora.scarpa@regione.veneto.it](mailto:eleonora.scarpa@regione.veneto.it)

For any kind of information we are at your disposal.

## PRESENTATION

09:30 – 10:00

### Greetings by the Authorities



*Director of the Institute of Geosciences and Earth Resources-  
National Research Council of the Padova branch Dr Sandra  
Donnici*



*Director of the Soil and Coast Defense Directorate of the Veneto  
Region Eng. Alessandro De Sabbata*



*Director of the Technical area Eng. Lorenzo Frison - Adige  
Euganeo Land Reclamation*





#### **Coordinator of the conference**

*Dr. **Valentina Bassan**, Soil and Coast Defense Directorate, Veneto Region presented the works of the day and showed a popular video produced by the Veneto Region with the collaboration of all the PPs for the final event, in which the theme of the salt intrusion is summarized and the main results of the MoST Project are illustrated.*



#### **Introduction of the MoST Project**

*Prof. **Paolo Salandin**, Department of Civil, Environmental and Architectural Engineering, University of Padova – Lead Partner of MoST Project illustrated the issue studied and the main objective of the Project*

10:00 - 11:00

**The Italian site: MoST project activities and outcomes**



*Dr. **Luigi Tosi** - Dr. **Chiara Cavallina**, Institute of Geosciences and Earth Resources-National Research Council, Padova illustrated the Hydro-stratigraphical setting, aquifer monitoring and vulnerability of the Venice site.*



*Dr. **Ester Zancanaro**, Department of Civil, Environmental and Architectural Engineering, University of Padova illustrated the Hydrological and agronomic monitoring of the Venice experimental site.*



*Eng. **Andrea Artuso**, Land Reclamation Authority Adige Euganeo illustrated the Built-up and instrumentation of an intake infrastructure to mitigate saltwater intrusion in the Venice site.*



*Prof. Paolo Salandin - Dr. Tommaso Trentin, Department of Civil, Environmental and Architectural Engineering, University of Padova illustrated Laboratory physical model: experiment outcomes for homogeneous and heterogeneous aquifers*



*Prof. Pietro Teatini - Dr. Anna Botto, Department of Civil, Environmental and Architectural Engineering-University of Padova illustrated the Local to field-scale numerical modelling of subsurface flow and saltwater mitigation in the Venice site.*



*Prof. Francesco Morari, Department of Agronomy, Animals, Food, Natural resources, and Environment, University of Padova illustrated the Guidelines to contrast salinization effects on crop production.*

11:30 – 12:30

**The Croatian site: MoST project activities and outcomes**



*Dr. **Ivan Racetin**, Department of geodesy and geoinformatics, Faculty of Civil Engineering, Architecture and Geodesy, University of Split illustrated the Agricultural conditions and vulnerability assessment for the Neretva river site.*



*Prof. **Veljko Srzić**, Department of Water Resources, Faculty of Civil Engineering, Architecture and Geodesy, University of Split illustrated the Hydro-geo settings of Neretva coastal system and laboratory activities.*



*Dr. **Iva Matic**, Department of Water Resources, Faculty of Civil Engineering, Architecture and Geodesy, University of Split illustrated the Numerical modeling activities and mitigation measures implementation*

12:30 – 13:00

## Discussion and conclusions

*At the end of the conference it was agreed on the effects of climate change in the territories in question. The current drought problem is compelling. The saline intrusion is a consequence of drought and this is the cause of the desertification of the soil due to a change in the structure of the clayey soils (especially typical of reclaimed areas) close to the coastal strip.*

*On the basis of these considerations, some proposals were put forward and discussed:*

- *The immediate use of the flood detention basins present in the area and nearing completion as basins not only for expansion but also for accumulation. Such a use would involve the introduction of further checks of the basins and a regulatory adaptation that regulates them.*
- *The need to act, in the long term, with the construction of retention basins in mountain areas, through the construction of dams to create large reservoirs that exploit large differences in height.*
- *Implement downstream works that retain water from rivers at their mouths and canals. It is essential to retain water in periods of greater rainfall, such as November, in order to have water available for irrigation and to recharge the aquifers.*
- *Modify irrigation systems favoring those with lower water consumption.*

The event continued with a guided visit in the historic centre of Venice with the PPs to effort the Partnership.



*Group photo during the visit to the historic center*

At the end of the day, the visit continues with a boat tour in Venice lagoon to see the territorial context of the salt intrusion issue in the area of Venice.



*Photos in the boat during the tour in the lagoon*



*Views of a moment of the guided tour in the lagoon*